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EXAMINER	
CROW, ROBERT THOMAS	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/522,001	GUMBRECHT ET AL.	
	Examiner	Art Unit	
	Robert T. Crow	1634	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 March 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,7,9-27 and 29-32* is/are pending in the application.

4a) Of the above claim(s) *16-27 and 29-31* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,7,9-15 and 32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *1/21/2009*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

FINAL ACTION

Status of the Claims

1. This action is in response to papers filed 21 January 2009 in which the specification was amendment and in response to papers filed 31 March 2009 in which claims 1-2 and 15 were amended, no claims were canceled, and new claim 32 was added. All of the amendments have been thoroughly reviewed and entered.

The previous rejections under 35 U.S.C. 112, first paragraph, are withdrawn in view of the amendments.

The previous rejections under 35 U.S.C. 103(a) not reiterated below are withdrawn in view of the amendments. Applicant's arguments have been thoroughly reviewed and are addressed following the rejections necessitated by the amendments.

Claims 1-4, 7, 9-15, and 32 are under prosecution.

Election/Restrictions

2. This application contains claims 16-27 and 29-31, which are drawn to an invention nonelected with traverse in the reply filed on 8 march 2007. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Information Disclosure Statement

3. The Information Disclosure Statement filed 21 January 200 is acknowledged. However, only the Abstract of Documents JP 6174679 and JP 9166571 are being

considered because English language translations of the remainder of the documents have not been provided.

Specification

4. The amendment filed 21 January 2009 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: the word “plane” replaces the word “areal” in the specification via the amendment; however, the specification contains no recitation of “planar” or “plane” contact.

Applicant is required to cancel the new matter in the reply to this Office Action.

Response to Arguments

5. Applicant's arguments filed 21 January 2009 (hereafter the “Remarks”) have been fully considered but they are not persuasive for the reason(s) listed below.

A. It is noted that Applicant’s arguments filed 31 March 2009 merely refer to the amended claims and do not present any further arguments regarding the rejections. Thus, the arguments filed 31 March 2009 have been fully considered.

B. Applicant argues on page 7 of the Remarks that there is support for "plane contact" in the original German document.

However, it is noted that 37 CFR 1.55 specifically requires when deemed necessary by the examiner, an English translation used to establish foreign priority must

be based on the certified copy of the foreign application and filed together with a statement that the translation of the certified copy is accurate. Thus, Applicant can overcome the new matter objection by supplying a proper certified translation of the appropriate paragraph of the original German document and a statement that the translation of the certified copy is accurate.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 1-4, 7, 9-15, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chateau (U.S. Patent No. 4,071,315, issued 31 January 1978) in view of Chen et al (U.S. Patent Application Publication No. US 2001/0051714 A1, published 13 December 2001) in view of Gordon et al (U.S. Patent Application Publication No. US 2001/0036641 A1, published 1 November 2001).

It is noted that the limitation "in which biochips placed onto a substrate having a plurality of measurement spots are used" appears in the preamble of independent claim 1. Because the limitation is in the preamble, the phrase "biochips placed onto a substrate" is not interpreted as a required active step of the claimed method.

Regarding claims 1 and 12, Chateau teaches a method for performing a high throughput analysis comprising the use of multiple biochips in the form of a multiplicity of successive reaction areas 13 (column 5, lines 10-30 and column 4, lines 15-20). A reaction area (i.e., each reaction area) has one or more reagents fixed thereon (column 1, lines 5-10), and the reagents are biomolecules in the form of antibodies pre-attached to the reactions areas (column 3, lines 50-67). The reaction areas are on a tape on a substrate; namely, reaction areas 13 are formed on a longitudinal tape that allows continuous analysis of the plurality of samples (column 3, lines 1-67 and Abstract). Thus, the tape is interpreted as the instantly claimed substrate, the biochips are interpreted as the reaction areas 13 on the tape (Figure 1), and the reaction areas 13 are interpreted as having a plurality of measurement reagents fixed thereon. A sample liquid, in the form of serum containing antibodies to the antigen spots of the biochips, is then deposited on the successive biochips 13 (column 5, line 60-column 6, line 10).

Because each biochip 13 has one or more reagents fixed thereon (column 1, lines 5-10), the sample liquid is applied to a plurality of measurement reagents fixed on the biochip 13. Chateau teaches flushing liquids are applied from above the substrate onto the fixed antibody locations of the biochips located on the substrate; namely, the tape is rinsed in rinsing station 25 from above (Figure 1 and column 6, lines 10-25). Chateau also teaches analyzing the samples of measurement liquid, wherein applying and analyzing are effected simultaneously at different biochips; namely, depositing and processing (i.e., analyzing) of several side by side specimens (i.e., in different biochips 13) occurs simultaneously with the recording (i.e., measuring) of information regarding each specimen and the treatment that is given to each specimen (i.e., at each biochip 13; column 2, lines 57-67). The substrate is moved to permit a continuous measurement at a speed determined by a movement cycle of the substrate; namely, depositing stations are multiplied so that multiple simultaneous analyses are carried out by the machine, wherein the tape is progressed through a number of areas as part of the depositing and analysis (column 5, lines 10-30). The progression of the tape is the claimed movement cycle. Chateau further teaches at least one spot array is enclosed by a hollow body in order to create a spatial separation from other spot arrays; namely, the substrate tape is run through enclosure 31 (Figure 2). Because at least one area 13 is held in the enclosure (column 5, lines 59-60 and claim 4), at least one spot array is held therein and is spatially separated from other spot arrays.

While Chateau teaches each biochip 13 has one or more reagents fixed thereon (column 1, lines 5-10), Chateau does not explicitly teach the plurality of fixed reagents

are spotted in an array (i.e., are formed as spots in an array; claim 1), nor does Chateau teach electrical measurements are carried out from below the substrate with the aid of contact elements; i.e., a tape having electrical contact elements (claim 1).

However, Chen et al teach a substrate in the form of a flexible tape (Abstract) having spots of probes thereon (paragraph 0017). Chen et al teach the spotting of the probes to form an array has the added advantage of allowing deposition of probe molecules on a tape on a high speed in a continuous fashion (i.e., claim 1; paragraph 0121). Chen et al also teach the tape substrate comprises a metallic electrode layer (paragraph 0119). The metallic electrode layer is a contact element (i.e., claim 1), and Chen et al teach the substrate has the added advantage of improving efficiency of hybridization of the immobilized probe to a target (paragraph 0154). Thus, Chen et al teaches the known technique of spotting molecules immobilized on a tape as well as the known teaching of using a substrate having electrical contact elements.

It would therefore have been obvious to a person of ordinary skill in the art at the time the claimed invention was made to have modified the method comprising a plurality of immobilized (i.e., fixed) reagents on a substrate as taught by Chateau so that the immobilized reagents (i.e., probes) are spotted on the substrate to form spot arrays in each biochip (i.e., reaction area) and so that the substrate has electrical contact elements thereon as taught by Chen et al to arrive at the instantly claimed method with a reasonable expectation of success. The ordinary artisan would have been motivated to make the modification because said modification would have resulted in a method having the added advantage of allowing deposition of probe molecules on a tape in a

high speed and continuous fashion as well as the additional added advantage of improving efficiency of hybridization of the immobilized probe to a target as explicitly taught by Chen et al (paragraphs 0121 and 0154). In addition, it would have been obvious to the ordinary artisan that the known techniques of spotting molecules immobilized on a tape and having the contact elements on the substrate as taught by Chen et al could have been applied to the method of Chateau with predictable results because the known techniques of spotting molecules immobilized on a tape and having the contact elements on the substrate as taught by Chen et al predictably result in a reliable method of fixing the molecules on the biochip and also predictably result in a substrate useful for biomolecular binding assays.

Chateau teaches a detector in the form of reading station 36, which reads the results (i.e., measures the assays; column 7, lines 30-40). Chen et al teach the probe tape is read for electrical conductance (paragraph 0162).

Neither Chateau nor Chen et al teach electrical measurements are carried out from below the substrate with the aid of contact elements; i.e., so that measurements are with biochips that are electrically readable (i.e., claims 1 and 12).

However, Gordon et al teach electrically readable biochips wherein spots of oligonucleotides 48 are attached to an uppermost layer of electrode 44 (Figures 1-2 and paragraphs 0015 and 0091). Gordon et al also teach the electrodes (i.e., 119 of Figure 4) have electrical contacts for measurements, in the form of data and address buses 126, 128, and 130, are below the substrate 112 (Figures 4 and paragraph 0131), which has the added advantage of allowing selective chemical activity at specific electrodes

on the chip (paragraph 0040). Thus, Gordon et al teach the known technique of using electrically addressable biochips (i.e., claim 12) having electrical contact elements for measurements to be carried out from below the substrate (i.e., claim 1).

It would therefore have been obvious to a person of ordinary skill in the art at the time the claimed invention was made to have modified the method comprising a substrate having biochip comprising an electrode with a biomolecule immobilized thereon as taught by Chateau in view of Chen et al so that the biochip is an electrically readable biochip (i.e., claim 12) having contact elements for measurements that are carried out from below the substrate (i.e., claim 1) to arrive at the instantly claimed invention as taught by Gordon et al with a reasonable expectation of success. The ordinary artisan would have been motivated to make the modification because said modification would have resulted in a method having the added advantage of allowing selective chemical activity at specific electrodes on a biochip as explicitly taught by Gordon et al (paragraph 0040). In addition, it would have been obvious to the ordinary artisan that the known technique of using the electrically addressable biochips having electrical contact elements for measurements to be carried out from below the substrate of Gordon et al could have been applied to the method of Chateau in view of Chen et al with predictable results because the biochips and elements of Gordon et al predictably result in a substrate useful having individually addressable electrodes.

Regarding claim 2, the method of claim 1 is discussed above. Chateau also teaches temperature regulation and air conditioning is interposed between the applying and analyzing; namely, the tape proceeds through incubation enclosure 31 after

depositing the measurement liquid by needle 28 but before the tape reaches result reading station 36 (Figure 2). The incubation enclosure 31 is identical to incubation enclosure 20, which controls temperature and humidity (column 5, lines 59-60), thereby interposing temperature and air conditioning on the sample.

Regarding claim 3, the method of claim 2 is discussed above.

It is noted that the claim is drawn to air conditioning "if performed." Thus, in the embodiment where air conditioning is not performed, claim 3 does not further limit claim 2, and dependent claim 3 is therefore obvious over the cited prior art.

Alternatively, Chateau also teaches the air conditioning serves as residence time of the measurement sample on the biochip; namely, the air conditioning in incubation enclosure 31 controls the humidity of the deposited sample (column 4, lines 59-60 and claim 4) for a specific period of time (column 8, lines 15-20).

Regarding claim 4, the method of claim 1 is discussed above. Chateau also teaches temperature regulation is interposed between the applying and analyzing of the sample liquid; namely, the tape proceeds through incubation enclosure 31 after depositing the measurement liquid by needle 28 but before the tape reaches result reading station 36 (Figure 2). The incubation enclosure 31 is identical to incubation enclosure 20, which controls the temperature (column 5, lines 59-60).

Regarding claim 7, the method of claim 2 is discussed above. Chateau also teaches the hollow body serves for air conditioning of the gas phase present above a spot array; namely, the spot arrays are the biochips, which are contained in enclosure 31, which is a hollow body. Because hollow body enclosure 31 controls the

temperature and humidity of the deposited sample (column 4, lines 59-60 and claim 4), the gas phase (i.e., the air) above the spot array is air conditioned.

Regarding claim 9, the method of claim 1 is discussed above. Chateau further teaches the substrate is made of a flat material; namely, a flat tape (Figures 1 and 2 and column 4, lines 28-39).

Regarding claim 10, the method of claim 9 is discussed above. Chateau teaches a band-shaped substrate made of flexible material is used; namely, a flexible tape (Figures 1 and 2 and column 4, lines 28-39), which is band-shaped.

Regarding claim 11, the method of claim 10 is discussed above. Chateau also teaches the band-shaped substrate is unwound from the roll in cartridge 2 (Figure 2 and column 4, lines 45-55) and transported through reading station 36, which is an analysis device (Figure 2 and column 7, lines 33-50).

Regarding claim 13, the method of claim 1 is discussed above. Chateau further teaches the substrate has analysis specific data present; namely, the each biochip (i.e., reaction area) on the substrate has data relating the specimen and specimen treatment, which is analysis specific data, recorded along the side of the tape next to each biochip (column 2, lines 57-66).

Regarding claim 14, the method of claim 1 is discussed above. Chateau teaches heat is supplied or dissipated from the rear side region of the substrate opposite to the array; namely, the tape is heated in enclosure 31 (column 4, lines 59-60 and claim 4). Because the entire enclosure 31 is heated, at least some heat is supplied or dissipated from the rear side region of the tape, which is opposite the array.

Regarding claim 15, the method of claim 14 is discussed above. Chateau also teaches a rear side region is brought into area contact with a coolable or heatable body; namely, the tape is heated in enclosure 31 (column 4, lines 59-60 and claim 4). Because the entire enclosure 31 is heated, the air gasses within the enclosure contact the rear of the carrier. The air gasses within the enclosure are a gaseous body that is coolable or heatable.

Regarding claim 32, the method of claim 1 is discussed above.

While Chateau does not teach the hollow body encloses the spot array with a peripheral wall, Chen et al teach a hollow body in the form of a mostly water-tight capillary is formed by closing a lid (i.e., placing a wall) on a narrow slot on a substrate, which peripherally encloses at least one spot of an array on the substrate because the capillary and lid peripherally seals the array substrate therein (Figures 17a-b and paragraph 0160). Chen et al also teach the peripheral wall has the added advantage of allowing improved hybridization efficiency (paragraph 0160). Thus, Chen et al teach the hollow body surrounds the spot array in a sealing fashion with a peripheral wall.

It would therefore have been obvious to a person of ordinary skill in the art at the time the claimed invention was made to have modified the method comprising a enclosing a spot array on a substrate within a hollow body as taught by Chateau in view of Chen et al and Gordon et al so that the enclosing of the spot array is accomplished with the peripheral wall as taught by Chen et al to arrive at the instantly claimed method with a reasonable expectation of success. The ordinary artisan would have been motivated to make the modification because said modification would have resulted in a

method having the added advantage of allowing improved hybridization efficiency as explicitly taught by Chen et al (paragraph 0160). In addition, it would have been obvious to the ordinary artisan that the known technique of using the peripheral wall of Chen et al could have been applied to enclose the biochip in the method of Chateau in view of Chen et al in view of Gordon et al with predictable results because the peripheral wall of Chen et al predictably results in an enclosing step useful in hybridization reactions.

Response to Arguments

9. A. On pages 8-11, Applicant merely summarizes the previous rejection of claim 1, and does not present any arguments.

B. Applicant argues on page 12 of the Remarks that the hollow body that causes only wetting of the arrays surrounded by the hollow body is not described in Chateau.

However, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., wetting of the arrays surrounded by the hollow body) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). The claim requires at least one of the spot arrays to be during the measurements, but does not specify which

array is within the hollow body, nor does the claim specify that wetting of the arrays within the hollow body is required.

In addition, Chateau teaches needle 22 deposits reagents onto array areas 13 within enclosure (i.e., hollow body) 20 (Figure 1 and column 5, lines 60-67).

C. Applicant argues on page 12 of the Remarks that Chateau does not teach spot arrays

However, as noted in the rejections above, Chateau is not relied upon for spot arrays; rather, Chen et al is relied upon for spot arrays. Thus, Applicant's arguments attack Chateau individually.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

D. Applicant argues on pages 12-13 of the Remarks that an array has cells and gaps.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., gaps and cells) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims.

In addition, a review of the specification yields no teaching whatsoever of “gaps” or “cells,” let alone the requirement that they be part of a limiting definition of any spot array. Thus, the spot arrays of Chen et al are properly interpreted as the claimed "spot arrays,” and the claim has been given the broadest reasonable interpretation consistent with the teachings of the specification regarding “a spot array” (*In re Hyatt*, 211 F.3d1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000) (see MPEP 2111 [R-1]).

E. Applicant argues on page 13 of the Remarks that Chateau does not teach optical measurement.

In response to applicant's argument that the references fail to show certain features of applicant’s invention, it is noted that the features upon which applicant relies (i.e., optical measurement) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. Rather, the claims are specifically drawn to electrical measurements, for which Chen et al is relied upon.

F. Applicant argues on page 13 of the Remarks that device 19 of Chateau is a vacuuming/suctioning device that is counter-indicative for making an electrical measurement.

However, device 19 is not relied upon for the instant rejection. In addition, device 19 appears upstream of the reagent dispensing device 20 and the detection device (Figure 1), and thus is encompassed by the open claim language “comprising” found in the instant claims.

Further, MPEP 716.01(c) makes clear that "[t]he arguments of counsel cannot take the place of evidence in the record" (*In re Schulze*, 346 F.2d 600, 602, 145 USPQ 716, 718 (CCPA 1965)). Thus, Applicant's mere arguments that a vacuuming/suctioning device is counter-indicative for making an electrical measurement cannot take the place of evidence in the record.

It is noted that the Response above should not be construed as an invitation to file an after final declaration. See MPEP 715.09 [R-3].

G. Applicant argues on page 13 of the Remarks that Chen et al describes a probe chamber and not a hollow body. Thus, Applicant's arguments attack Chen et al individually.

However, Chateau is relied upon for the teaching of the hollow body.

Further, the hybridization chamber of Chen et al (Figure 17) is clearly a hollow body.

In addition, in response to applicant's arguments against the references individually, it is reiterated that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references.

H. Applicant argues on page 13 of the Remarks that Chen et al does not teach electrical measurement.

However, paragraph 0162 of Chen et al clearly teaches the probe carrier is read for electrical conductance.

In addition, in response to applicant's arguments against the references individually, it is reiterated that one cannot show nonobviousness by attacking

references individually where the rejections are based on combinations of references. Gordon et al is also relied upon for electrical detection on a carrier as described above.

I. Applicant argues on page 13 of the Remarks that detection electrodes require different spatial and voltage type conditions.

However, it is reiterated that paragraph 0162 of Chen et al clearly teaches the probe carrier is read for electrical conductance, and that Gordon et al is also relied upon for electrical detection on a carrier as described above.

Further, it is reiterated that the arguments of counsel cannot take the place of evidence in the record. Thus, Applicant's mere arguments that detection electrodes require different spatial and voltage type conditions cannot take the place of evidence in the record.

It is also reiterated that the Response above should not be construed as an invitation to file an after final declaration.

J. Applicant argues on page 13 of the Remarks that Gordon et al do not teach high throughput, a substrate with multiple biochips, or a hollow body. Thus, Applicant's arguments attack Gordon et al individually.

However, as detailed in the rejections above, the prior art of Gordon et al is not relied upon for high throughput, a substrate with multiple biochips, or a hollow body.

In addition, in response to applicant's arguments against the references individually, it is reiterated that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references.

K. Applicant argues on pages 13-14 of the Remarks that there is no suggestion in Gordon et al to combine it with Chateau and Chen et al

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Chen et al teach detection of electrical conductance. Gordon et al teach electrodes (i.e., 119 of Figure 4) having electrical contacts for measurements, in the form of data and address buses 126, 128, and 130, are below the substrate 112 (Figures 4 and paragraph 0131), which has the added advantage of allowing selective chemical activity at specific electrodes on the chip (paragraph 0040). Thus, Gordon et al teach the known technique of using electrically addressable biochips having electrical contact elements for measurements to be carried out from below the substrate, and the claims are therefore obvious for the reasons stated above.

In addition, it is also noted that the Supreme Court ruling for *KSR Int'l Co. v. Teleflex, Inc* (No 04-1350 (US 30 April 2007) forecloses the argument that a **specific** teaching, suggestion, or motivation is required to support a finding of obviousness. See *Ex parte Smith* (USPQ2d, slip op. at 20 (Bd. Pat. App. & Interf. June 25, 2007).

L. Applicant also argues on pages 13-14 of the Remarks that the biochips would short-circuit the data buses of Gordon et al based on Figure 4.

However, Gordon et al clearly teaches the invention is used in detection of oligonucleotide probes on a surface. Thus, Applicant's oblique argument that Gordon et al is not combinable with the biochip-based method of Chateau in view of Chen et al is sharply contradicted by the teaching of Gordon et al that the method detects reactions of oligonucleotide probes on a surface.

Furthermore, it is reiterated that the arguments of counsel cannot take the place of evidence in the record. Thus, Applicant's mere arguments that the biochips would short-circuit the data buses of Gordon et al cannot take the place of evidence in the record.

It is also reiterated that the Response above should not be construed as an invitation to file an after final declaration.

M. Thus, in conclusion, it is reiterated that many of Applicant's arguments attack the references individually. It is reiterated that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. Because the combination of references teach all of the claimed limitations as discussed in the rejections above, the claims are properly rejected over the cited prior art.

N. The remaining arguments regarding dependent claim 15 on pages 14-15 of the Remarks have been considered but are moot in view of the new ground(s) of rejection necessitated by the amendments.

Conclusion

10. No claim is allowed.

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

12. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert T. Crow whose telephone number is (571)272-1113. The examiner can normally be reached on Monday through Friday from 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James (Doug) Schultz can be reached on (571) 272-0763. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/R. T. C./
Examiner, Art Unit 1634

Robert T. Crow
Examiner
Art Unit 1634

/JD Schultz/
Supervisory Patent Examiner, Art Unit 1635